

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031010 A2

(51) International Patent Classification⁷: C22B (72) Inventors; and
(21) International Application Number: PCT/GB2004/004145 (75) Inventors/Applicants (for US only): DELVES, James, Edward [GB/GB]; 16 Drakes Way, Portishead, Bristol BS20 6LB (GB). PARKINSON, David, John [GB/GB]; Arodene, Walton Down, Walton-in-Gordano, Cleveland BS21 7AR (GB).

(22) International Filing Date: 28 September 2004 (28.09.2004) (74) Agent: AKERS, Noel, James; N.J. Akers & Co., Grey Friars, Spring Road, Harpenden, Hertfordshire AL5 3PP (GB).

(25) Filing Language: English (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,

(26) Publication Language: English

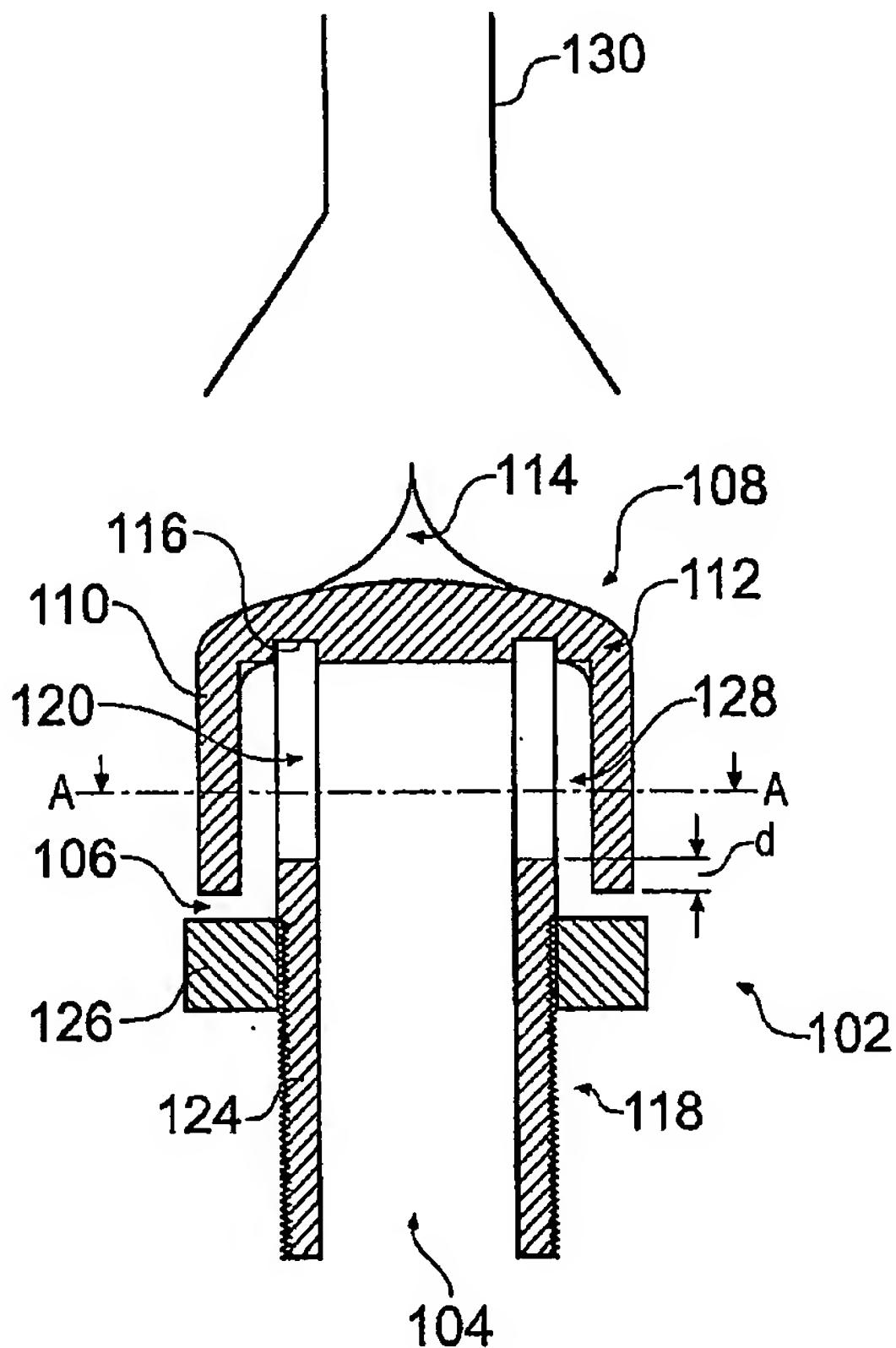
(30) Priority Data: 0322754.3 29 September 2003 (29.09.2003) GB

(71) Applicant (for all designated States except US): KCC GROUP LIMITED [GB/GB]; 111 Windmill Road, Sunbury on Thames, Middlesex TW16 7EF (GB).

[Continued on next page]

(54) Title: APPARATUS FOR ENHANCING SOLUBILITY

WO 2005/031010 A2



(57) Abstract: Apparatus for enhancing solubility of a solute in a solvent, the apparatus comprising a solvent and/or solute inlet (104) having a fluidising unit which creates a vortex such that a fluids interfacial/boundary layer exists within the vortex where enhanced mass transfer, or dissolution of solute into the solvent takes place.



TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.